



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

649.5112
Job Sheet 176021



Part No: 649.5112

Job Qty: 10 ea

Part Name: RH Wiper Deflector



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/13/18

Job Tracking No:

Due Date: 4/20/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: 649.5100 REV.D IPP REV:A NEW ISSUE 13-10-23 JLM VERIFIED BY:DD IPP REV:B 17.11.20 AS PER DWG REV.C DD VERF:RQ IPP REV:C 18.03.28 AS PER DWG REV.D DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	10 Ea		4/17/18	0.00	0.00	Start Up Machining-1		
100	Bandsaw	10 pcs		4/17/18	0.00	0.33	Bandsaw1		
110	CNC Vertical Machining	10 pcs		4/20/18	0.00	69.93	HAAS 5 Axis		
120	QC	10 pcs		4/20/18	0.00	0.00	QC2		
130	QC	10 pcs		4/20/18	0.00	0.00	QC8 Machining-1		
140	Outsource	10 pcs		4/20/18			ATG001-VC		
150	Packaging	10 pcs		4/20/18	0.00	0.00	Packaging2		
155	QC	10 pcs		4/20/18	0.00	0.00	QC5		
180	Packaging	10 pcs		4/20/18	0.00	0.00	Packaging3-1		
190	QC21-SA	10 Ea		4/20/18	0.00	0.00	QC21		

Part Op 100 - Cut Blank at 7.50"

Descriptions: 110 - 1-Machine per folio Fb352 DWG REV: _____ FOLIO REV: _____ 2- deburr and break all sharp edges

140 - Issue P/O to ATG : PO039824. AS PER DWG 649.5100 1- Black Anodize 2- PRIME, SEE NOTE #2 Certification of Conformity is required

180 - ***IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV***

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M7075T6S4.500X5.000	7075-T6S Sheet 4.500" Thick X 5.000" Wide	6.2500 ft (.625 ea)	90-Start up Operation	5068 789

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	M7075T6S4.500X5.000	6	27	0



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Container No: S069555



Part: 649.5112

Job No: 176021

Serial No/Batch: S069555

Revision: D

Inspector:

cations

I not be found.

Plex 4/13/18 1:57 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

DQA: _____ Date: _____



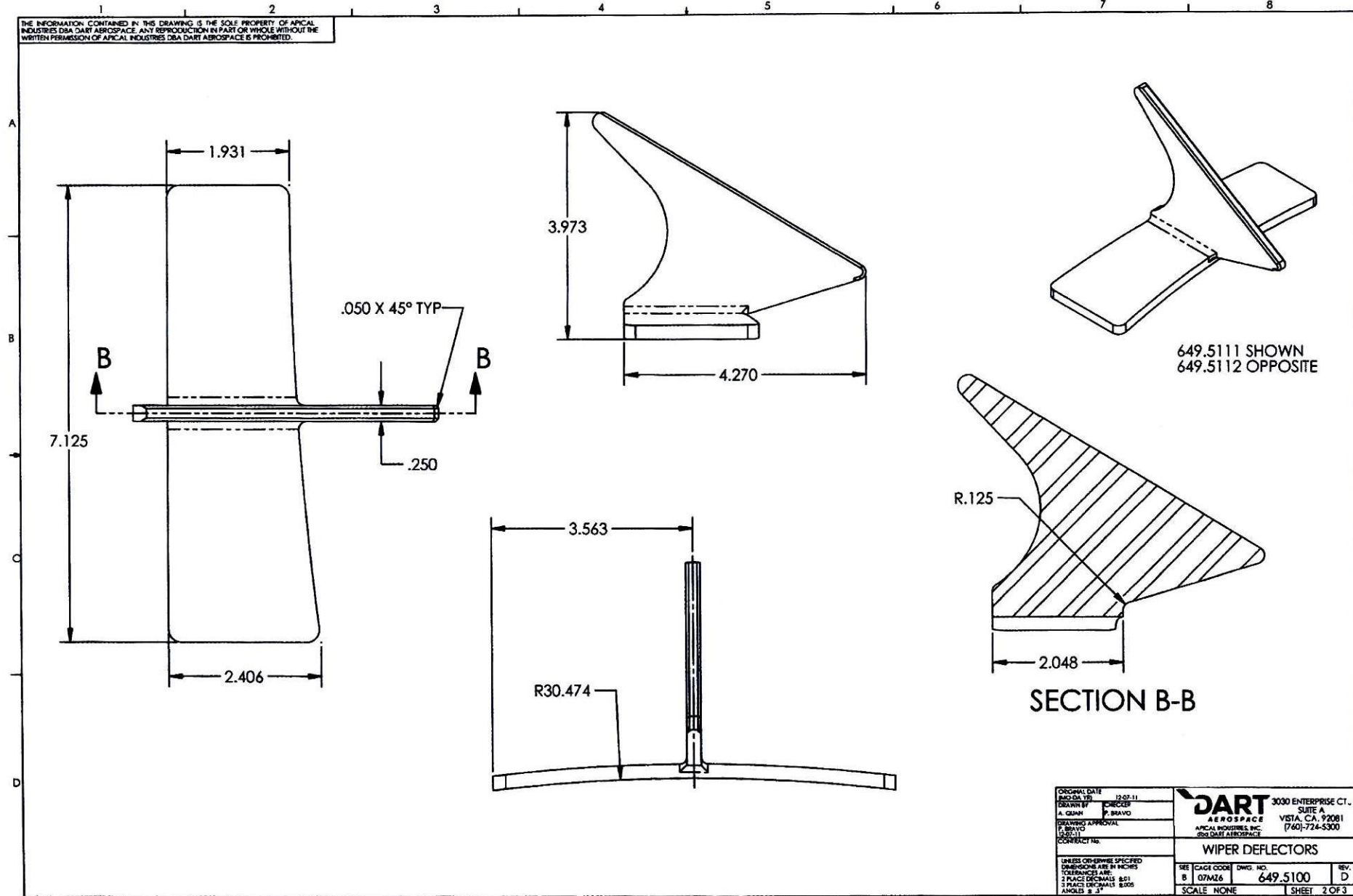
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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ORIGINAL DATE 12-07-11		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY A. GUNW		DART AEROSPACE	
CHECKED BY P. BRAVO		APICAL INDUSTRIES INC. DBA DART AEROSPACE	
DRAWING APPROVAL P. BRAVO		WIPER DEFLECTORS	
CONTRACT NO.		SEE CAGE CODE B 07MA26	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACES DECIMALS .001 3 PLACES DECIMALS .005 ANGLES .5°		DWG. NO. 649.5100	
SCALE NONE		REV. D	
SHEET 2 OF 3			

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Skid-tube ☐</td> <td style="width: 15%;">Cross tube ☐</td> <td style="width: 15%;">Water Jet ☐</td> <td style="width: 15%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____																							
Misidentified ☐	Past Due ☐																								



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO039824**

Supplier: ATG001-VC
A.T.G. Industries Inc
731 INDUSTRIELLE ROAD
ROCKLAND
ON
K4K 1T2 Canada
Phone: 613-446-4544
Fax: 613-446-4556

Attention: Lalande, Marc-Andre

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO039824

PO Date: 5/8/18

Due Date: 5/17/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	175552	644.4113	Spacer, Stop 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	20 pcs	0 pcs	20 pcs	\$4.20/pcs	\$84.00
2	175557	644.4114	Washer, Pivot 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$5.70/pcs	\$57.00
3	175558	644.4119	Spacer, Fwd Stop 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	20 pcs	0 pcs	20 pcs	\$4.50/pcs	\$90.00

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	175738	649.4813	Shim ISSUE P/O: _____ As Per MPP-172 Section 2.1, Hard Anodize IAW MIL-A-8625, Type III, Class 2, Color Black As Per MPP-172 Section 4.2 Prime IAW MIL-P-23377J Type1 Class N	Firmed	5/16/18	11 pcs	0 pcs	11 pcs	\$7.45/pcs	\$81.95
	172764			Firmed	5/16/18	15 pcs	150 pcs	15 pcs	\$7.45/pcs	\$111.75
	177140			Firmed	5/16/18	20 pcs	200 pcs	20 pcs	\$7.45/pcs	\$149.00
Sub Total:						46	0	46		\$342.70
5	176020	649.5111	LH Wiper Deflector Issue P/O to ATG : _____ AS PER DWG 649.5100 1- Black Anodize as per 2- PRIME AS PER DWG, SEE NOTE #2 Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$17.50/pcs	\$175.00
6	176604	D5230-1	Mounting Plate Outsource process-Anodize per QSI017 4.1.10.1 ISSUE P/O: _____ SUPPLIER: ATG HARD ANODIZE BLACK AS PER MIL SPEC AND DWG C OF C IS REQUIRED	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$9.70/pcs	\$97.00
7	176021	649.5112	RH Wiper Deflector Issue P/O to ATG : _____ AS PER DWG 649.5100 1- Black Anodize 2- PRIME, SEE NOTE #2 Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$17.50/pcs	\$175.00
8	175562	644.4124	Washer, Pivot 1-ISSUE P/O TO ATG: _____ 2-Anodize Black -MPP-172 Section 2.1 -Hard Anodize IAW Mil-A-8625 Type 3 Class 2 3-Certification of Conformity is required	Firmed	5/16/18	10 pcs	0 pcs	10 pcs	\$5.70/pcs	\$57.00
9	170444	646.2910	Deflector Issue P/O to ATG : _____ Hard Anodize, Color Black / Prime As per Dwg 646.2900 Rev. N/C	Firmed	5/16/18	8 pcs	0 pcs	8 pcs	\$49.20/pcs	\$393.60
	174119			Firmed	5/17/18	7 pcs	0 pcs	7 pcs	\$49.20/pcs	\$344.40
Sub Total:						15	0	15		\$738.00
10	177135	649.5012	Deflector Issue P/O to ATG: _____ AS PER MPP-172 SECTION 2.1, HARD ANODIZE COLOR BLACK, PER IAW MIL-A-8625 TYPE 3 CLASS 2 AS PER MPP-172 SECTION 4.2, PRIME AS PER IAW MIL-PRF-23377 TYPE 1 CLASS N Certification of Conformity is required	Firmed	5/16/18	16 pcs	0 pcs	16 pcs	\$8.50/pcs	\$136.00
Grand Total:										\$1,951.70
Order Notes										

AT 18/05/18

AT 18/05/18

AT 18/05/18

DAS
11
9-89



A.T.G. Industries Inc.
731 Industrielle Street
Rockland, ON K4K 1T2
Canada

Ph: (613) 446-4544

Fax: (613) 446-4556

Pack List

Number: 915176

Date: 16-May-18

To

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ship To

Chrisoula Tsimiklis
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury, ON K6A 1K7

Ph: 613 632-9577

Fax: 613 632-1053

Ph: 613 632-9577

Fax: 613 632-1053

Terms		Ship Via	
		OUR TRUCK	
Quantity	Description		
	Please reference this document's Pack List number on all correspondences regarding this shipment. If you have any questions, please contact us.		
46 ea	Part: 649.4813 Shim Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23040	Rev: E	PO: PO039824 Line: 4
10 ea	Part: 649.5111 LH Wiper Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23041	Rev: D	PO: PO039824 Line: 5
10 ea	Part: 649.5112 RH Wiper Deflector Hard Black Anodize per MIL-A-8625F, Type III, Class 2, .0005-.0045" (.5 - 4.5mils) Prime per MIL-PRF-23377, Type I, Class N (Customer Supplied), .0006-.0009" (.6 - .9 mils) per drawing. Job: 23043	Rev: D	PO: PO039824 Line: 7
CERTIFICATE OF CONFORMANCE A.T.G Industries Inc. certifies that all items in this shipment conform to the requirements. Date: <u>16/05/2018</u> Certified Signature: <u>[Signature]</u> Receiver Signature: _____ A.T.G Industries Inc. is AS9100 Registered and Nadcap Chemical Processing Accredited. Note: This Packing Slip may contain parts that have been PLATED. Items that are plated may be subject to natural tarnishing and it is suggested that they be inspected within 24 hours of Made in Canada.			

DAS
MAY 16 2018
11
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